

March 13 and 14, 2017 in Sendai, Miyagi, Japan

The 25th Workshop on Sustained Simulation Performance Toward Future HPC Technologies

Session Program

Workshop Day 1 (Mon., March 13th, 2017)

9:45-	Registration
10:30-10:45	Opening Session
10:45-12:15	Session 1 "HPC Systems"
12:15-13:15	Lunch
13:15-15:15	Session 2 "System Software I"
15:15-15:35	Coffee Break
15:35-17:05	Session 3 "Applications I"

Workshop Day 2 (Tue., March 14th, 2017)

9:45-	Registration
10:15-11:15	Session 4 "System Software II"
11:15-11:20	Break
11:20-12:20	Session 5 "HPC Trends"
12:20-13:20	Lunch
13:20-14:50	Session 6 "Applications II"
15:20-15:40	Coffee Break
15:40-17:10	Session 7 "Future HPC Systems"
17:10-17:20	Concluding Remarks

Workshop Day 1 (Mon., March 13th, 2017)

Time	Presentation
9:45-	Registration
	Opening Session
10:30-10:35	<i>Opening Remarks</i> Hiroaki Kobayashi (Tohoku Univ.)
10:35-10:45	<i>HPC Policy in Japan</i> Katsuyuki Kudo (MEXT)
	Session 1 "HPC Systems"
10:45-11:15	<i>Introduction of Power-effective supercomputer, Shobu</i> Ryutaro Himeno (Riken)
11:15-11:45	<i>Technical strategies for HPC</i> Michael Resch (HLRS)
11:45-12:15	<i>SX-ACE's Operations and Application Development for the Future</i> Hiroaki Kobayashi (Tohoku Univ.)
12:15-13:15	Lunch
	Session 2 "System Software I"
13:15-13:45	<i>Theory and practice of efficient supercomputer management</i> Vadim Voevodin (Moscow State Univ.)
13:45-14:15	<i>Performance tuning with machine learning</i> Hiroyuki Takizawa (Tohoku Univ.)
14:15-14:45	<i>Improvement and extension of a middleware system for Big Data analytics</i> Takuya Araki (NEC Corporation)
14:45-15:15	<i>A high performance infrastructure for a deep learning-based orthodontic treatment in dentistry</i> Chonho Lee (Osaka Univ., Cybermedia Center)
15:15-15:35	Coffee Break
	Session 3 "Applications I"
15:35-16:05	<i>Turbulence in a Fluid Stratified by a High Prandtl-Number Scalar</i> Hideshi Hanazaki (Kyoto Univ.)
16:05-16:35	<i>Coupled Simulation With Two Coupling Approaches On Parallel Systems</i> Neda Ebrahimi Pour (Univ. of Siegen)
16:35-17:05	<i>Quantum ESPRESSO on SX-ACE</i> Osamu Watanabe (NEC Corporation)

Workshop Day 2 (Tue., March 14th, 2017)

Time	Presentation
9:45-	Registration
	Session 4 "System Software II"
10:15-10:45	<i>FLAGSHIP 2020 project and XcalableMP: Challenges for post-petascale and exascale computing</i> Mitsuhsa Sato (Riken AICS)
10:45-11:15	<i>High-Level Tools for Code Modernization and Migration on Future Generation Supercomputers</i> Ritu Arora (Texas Advanced Computing Center)
11:15-11:20	Break
	Session 5 "HPC Trends"
11:20-11:50	<i>Global System Science - A new community with high potential for HPC</i> Bastian Koller (HLRS)
11:50-12:20	<i>Is Moore's Law Limiting Performance Growth in Top500?</i> Wolfgang Bez (NEC Deutschland)
12:20-13:20	Lunch
	Session 6 "Applications II"
13:20-13:50	<i>Numerical modelling of progressive failure in carbon fiber reinforced plastic composites</i> Tomonaga Okabe (Tohoku Univ.)
13:50-14:20	<i>Dynamic Load Balancing for CFD and Multiphysics Applications</i> Matthias Meinke (AIA RWTH Aachen)
14:20-14:50	<i>Vectorization of high-order DG in Ateles for the NEC SX-ACE</i> Harald Klimach (Univ. of Siegen)
14:50-15:20	<i>Spectral structures for nonlinear operators and applications</i> Uwe Kuester (HLRS)
15:20-15:40	Coffee Break
	Session 7 "Future HPC Systems"
15:40-16:10	<i>Aurora, the Next Generation Vector Supercomputer</i> Yohei Yamada (NEC Corporation)
16:10-16:40	<i>Some Thoughts on Future I/O</i> Thomas Boenisch (HLRS)
16:40-17:10	<i>Earth Simulator operation, power management and next system plan</i> Kenichi Itakura (JAMSTEC)
17:10-17:20	Concluding Remarks